

# Supporting analyses of land change for NCA

## Beneficial developments since NCA4

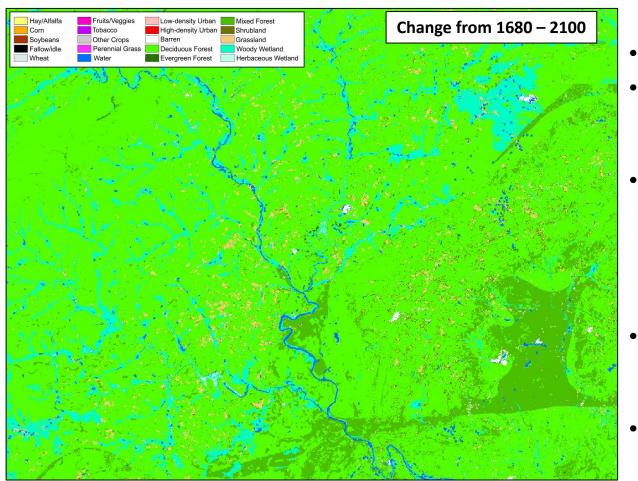
- New platforms for Earth observation continue to grow at an astounding rate, both commercial and government
- Efforts to harmonize observations from different satellite platforms to increase temporal observation density and repeat coverage
- New approaches for LULC change analysis are now practical at national scales that use every pixel in the historical record
  - LCMAP project for conterminous US

## Supporting analyses of land use for NCA

## Continued Gaps in understanding climate/land use linkages

- Consistent, national scale monitoring of land USE as opposed to surface cover
- Harmonizing disparate sources of data for land change
- Difficulties of consistent attribution of causation between climate and landscape change
- Need for long-term landscape histories and scenario-based landscape projections to support analyses of climate feedbacks

#### Long-term modeling (historical to future): Facilitating Climate Analyses



- Long term time-series
- Maintains consistency with USGS land cover databases
- Uses real ownership and land management parcels
  - Realistic representation of landscape pattern
- Consistency with coarser-scale IPCC climate scenarios
- Dynamic landscape response to climate, water